

## Important Notice

This parking assist system is designed as a reversing aid. It is not a substitute of driver's responsibilities normally assumed when reversing. Steelmate does not liable for any damages caused by reversing only rely on this system. Proper driving skills, such as slow down, use of mirror or lookout etc. is always essential.

1. This unit is for vehicles with 24V DC only
2. It should be installed by a professional
3. Avoid high temperature and high voltage while laying out the wire harness
4. Wire connection point should be insulated
5. Conduct test after finishing the installation

### Caution:

Changes or modifications to this unit not expressly approved by the party responsible for compliance will void the user's authority to operate the equipment. Any change to the equipment will void FCC grant.

### NOTE:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:  
 --Reorient or relocate the receiving antenna.  
 --Increase the separation between the equipment and receiver.  
 --Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.  
 --Consult the dealer or an experienced radio/TV technician for help.

## About Parking Assist System (PTS)

The parking assistant system is an ultrasonic distance monitoring system. It electronically detects the area behind your vehicle during reversing, and alerts you with audible tone and digital display if there is an object behind your car.

Every piece of our products has passed the most stringent test before releasing to the market. It is reliable at a wide temperature range (-40°C ~ +80°C) and becomes very useful when you are reversing at a raining day, snowing day or at night etc. With the help of Steelmate parking assistant system, you can enjoy a convenient and nervous - free reversing.

### Features:

1. Detection distance: 0.30 ~ 2.50 m / 1.0~8.4ft
2. No wire from ECU to display
3. Self-test function activated by reverse gear
4. 3 Colour matrix LED display shows the object's location
5. Anti-false alert technology
6. All weather design (-40°C ~ +80°C)
7. Easy installation
8. Volume control

### Specifications:

- a) Voltage: 24 V±2V
- b) ECU working current: 35mA±5mA
- c) Display working current: < 200mA
- d) Buzzer: 70 ~ 90dB

## Possible Causes And Solutions

### 1. No beep at power up or no LED light flashing

- 1).Is power wire connected to ECU correctly?
- 2).Verify the ground connection
- 3).Have you connected the correct reversing light wire?

### 2. False warning tone or false LED flashing

- 1).Is sensor mounted too low or pointing to the ground?

### 3.Sensors do not detect any objects

- 1).Are sensors properly plugged into the correct sockets?

If the problem persists, please follow these steps:

A. For consumers: Contact your dealer or nearby steelmate service center

B. For Installer or dealer:

- 1).Replace the ECU and re-check the system
- 2).Test the sensors with certified ECU and using a flat wooden board
- 3).Plug the certified sensors into the ECU and re-check
- 4).Email your questions and we will reply ASAP.

More tech tips are available on our website: [www.steel-mate.com](http://www.steel-mate.com)

## Warranty

I. The unit is warranted for a limited period from the date of purchase. In the event of any defect arising in the unit when you use it as per the instructions during the warranty period, the repair would be carried out free.

- \* It is required to show this Warranty Card when have the unit repaired.
- \* The model and series number on unit must be the same as the information in the Warranty Card.

II. This warranty is non-transferable and is automatically void if:

- \* The original purchaser has not completed the warranty card
- \* The unit's serial number is defaced, missing or altered
- \* The unit has been modified or used in a manner contrary to its intended purpose
- \* The unit has been damaged by accident, unreasonable use, neglect, improper service and installation.

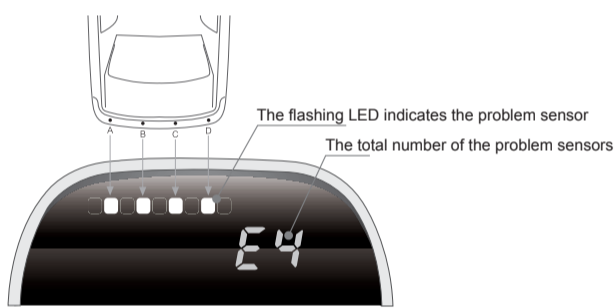
III. The warranty does not cover damage to the unit caused by installation or removal of the unit.

## Self-test Function

The system will test all the sensors when the reversing gear is engaged.

If all the sensors are normal, the system will beep once and the LED display will flash once.

If there is any problem with the sensors, the system will beep three times to indicate that one or more sensors have problems.



Sensor A has problem (E1: 1 problem sensor)



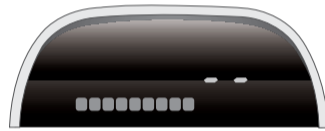
Sensor A,D have problem (E2: 2 problem sensors)

\*Check the problem sensor or replace the damaged sensor.

## How Does The System Work

The system will test all the sensors when the reversing gear is engaged, and then the system detects objects.

- a) The object distance is: >2.5m / 8.4ft:



Zone 1 green LED of display will flash

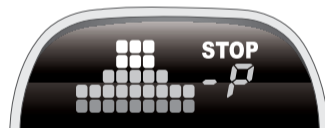
- b) The object distance is: 2.5~0.3m / 8.4~1.0ft:

The display will show the distance by digital number and show the object's location in the matrix LED display.

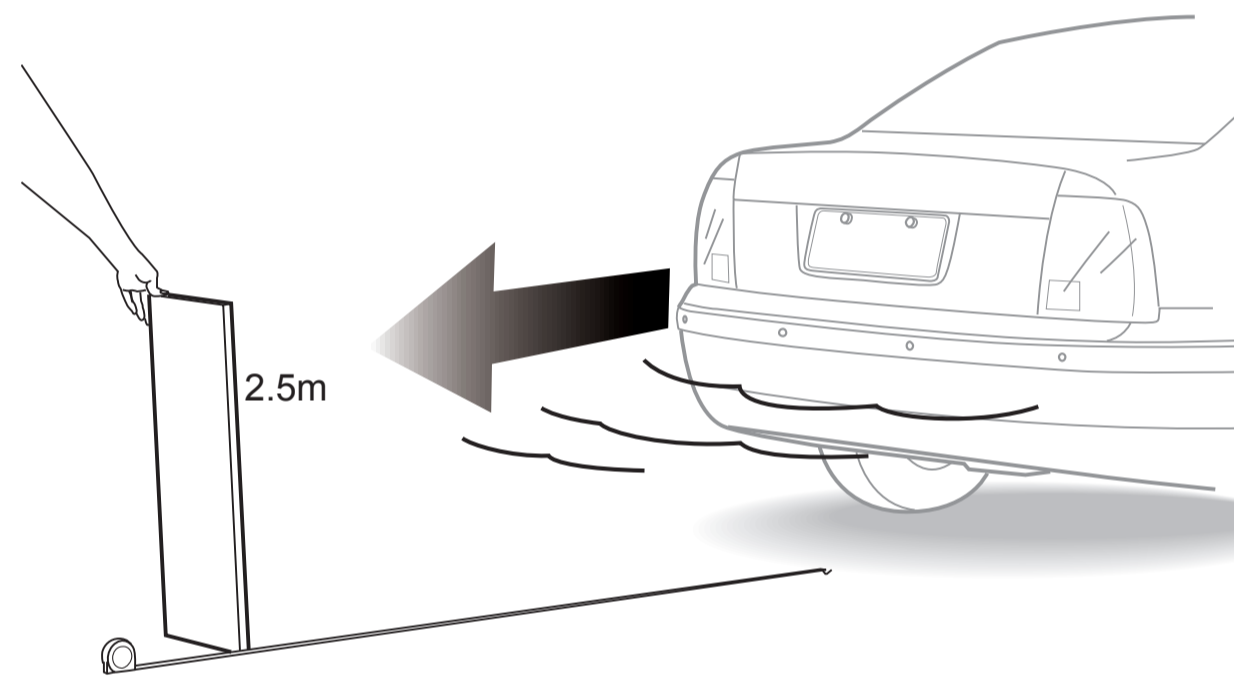


- c) The object distance is: <0.3m / 1.0ft:

"-P" will be shown and "Stop" will flash on the display

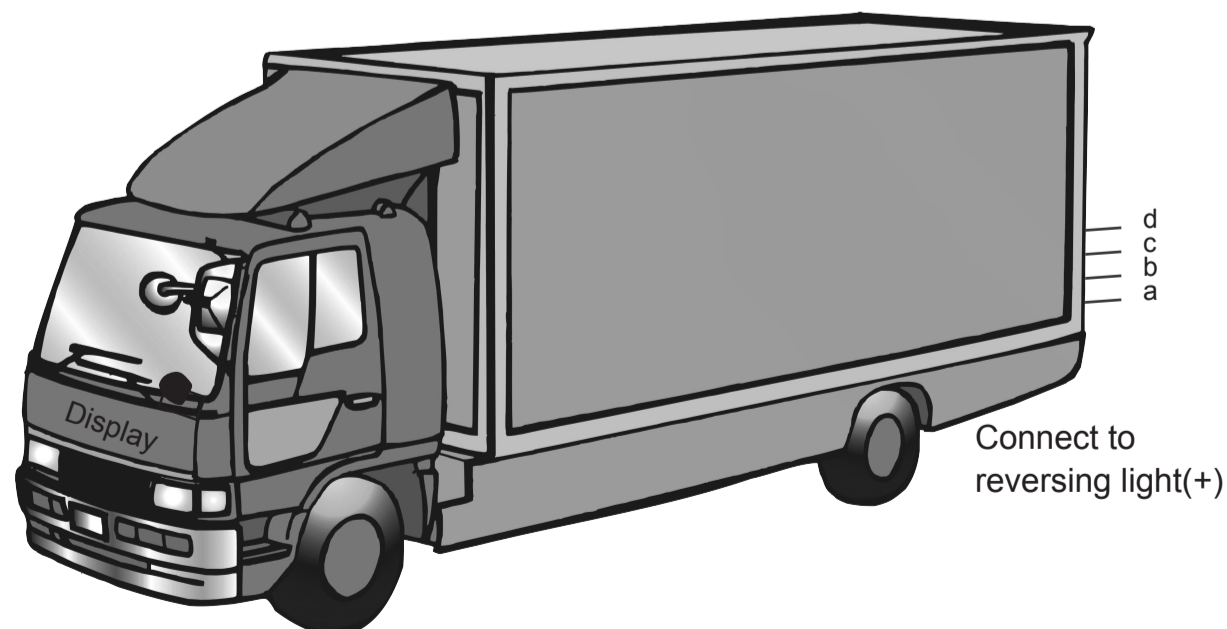


## Function Test After Installation



Testing the system features with a wooden plate (20cm wide x 100cm height) after the installation.

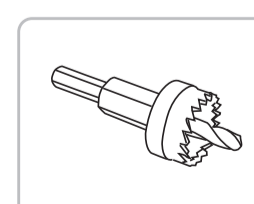
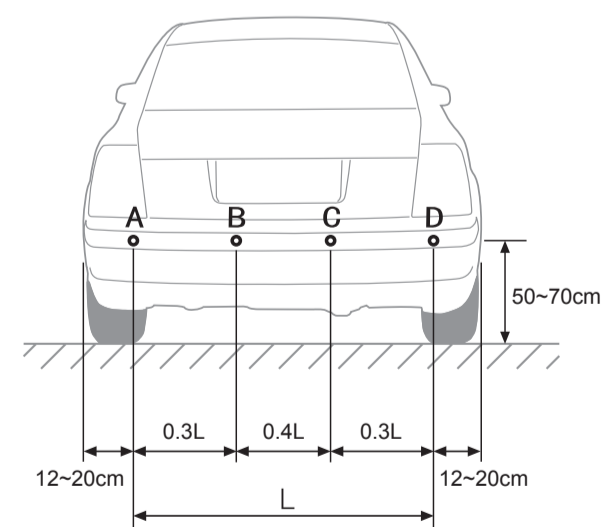
## Installation Diagram



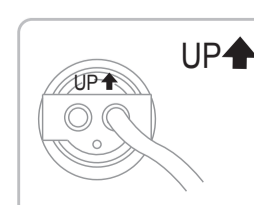
Connect to reversing light(+)

Connect to reversing light(+)

## How To Install The Sensor

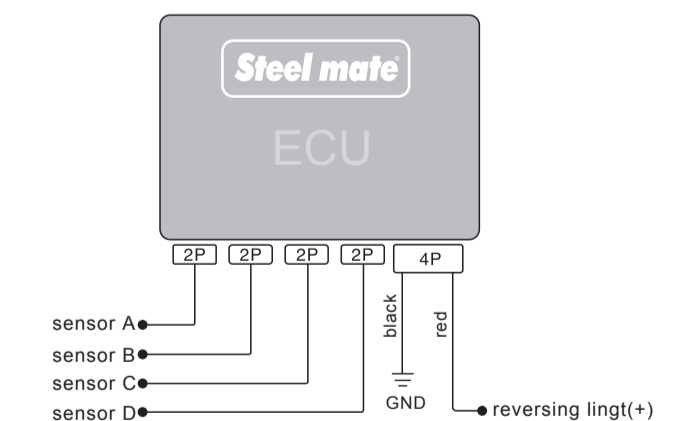


1. Check the size of the hole saw to be compatible to the diameter of the sensor.

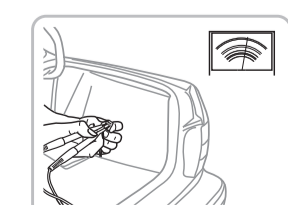


2. Install the sensor vertically, the "up" sign must be on upside.

## ECU Installation



Mount ECU in trunk



Connect the red wire to reversing lingt(+)